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(54) Title: THERMAL INSULATION STRUCTURES COMPRISING LAYERS OF EXPANDED GRAPHITE PARTICLES COMPRESSED TO DIFFERENT DENSITIES AND THERMAL INSULATION ELEMENTS MADE FROM THESE STRUCTURES

(57) Abstract: Thermal insulation structure comprising at least one flexible layer based on compressed expanded graphite particles characterised in that the density of the said flexible layer is equal to at least 0.4 g/cm³ (400 kg/m³) and in that the said thermal insulation structure also comprises another layer close to the said flexible layer based on compressed graphite particles with a lower density, typically less than 0.4 g/cm³ (400 kg/m³). Preferably, the dense compressed expanded graphite layer has a density of between 0.5 and 1.6 g/cm³ (500 and 1600 kg/m³) and the said sub-dense compressed expanded graphite layer has a density of between 0.05 and 0.3 g/cm³ (50 and 300 kg/m³). Thermal insulation elements are also described that are designed to be fitted on furnaces operating under non-oxidising atmosphere and at temperatures of more than 800°C.

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INTERNATIONAL SEARCH REPORT

International Application No
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A. CLASSIFICATION OF SUBJECT MATTER

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According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 C04B B32B F16L

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, WPI Data, PAJ, COMPENDEX, INSPEC

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
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☒ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

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G document member of the same patent family

Date of the actual completion of the international search

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